

DOCUMENT RESUME

ED 083 979

JC 730 275

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TITLE Personality Orientations and Vocational Choice in
Community College Students.
INSTITUTION California Univ., Los Angeles. ERIC Clearinghouse for
Junior Coll. Information.; California Univ., Los
Angeles. Graduate School of Education; California
Univ., Los Angeles. Library.
REPORT NO ERIC-JC-Pap-36
PUB DATE Dec 73
NOTE 32p.
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *College Freshmen; *Community Colleges; Followup
Studies; *Goal Orientation; Individual
Characteristics; Longitudinal Studies; *Occupational
Choice; *Personality Studies; Student
Characteristics; Surveys
IDENTIFIERS *California

ABSTRACT

Data from a longitudinal study--the 3-D study--of freshmen at three California community colleges are presented. This study views freshmen on the basis of a construct called Functional Potential. Functional Potential is a hypothetical construct built on psychodynamic principles which describe the degree to which a person can tolerate ambiguity, delay gratification, exhibit adaptive flexibility, demonstrate goal directedness, relate to self and others, and have a clear sense of personal identity. Ss were 1876 freshmen tested during their first week in school and again at the end of their second semester. Information collected regarding the students included individual characteristics, demographic information, and data regarding attitudes, feelings, values, and goal directedness. Results are discussed. (CK)

ED 083979

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PERSONALITY ORIENTATIONS AND
VOCATIONAL CHOICE IN COMMUNITY COLLEGE STUDENTS

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University of California
Los Angeles 90024

Topical Paper No. 36
December 1973

The material in this Topical Paper was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Prior to publication, the manuscript was submitted to the California Personnel and Guidance Association for critical review and determination of professional competence. This publication has met such standards. Points of view or opinions, however, do not necessarily represent the official view or opinions of either the California Personnel and Guidance Association or the National Institute of Education.

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INTRODUCTION

The data presented in this Topical Paper come from a longitudinal study of freshmen at three California community colleges. Abbreviated the "3-D study," the name stand for "The Project for the Design, Development, and Dissemination of Research Models for Junior Colleges." The project was undertaken by the staff of the ERIC Clearinghouse for Junior Colleges in 1969-70 and results have been reported in several publications.

The 3-D Project differs from previous research on college students, indeed, from most attempts to understand students at any educational level. It views freshmen in three colleges on the basis of a construct formulated by Brawer called Functional Potential (1970 and 1971). Functional Potential is a hypothetical construct built on psychodynamic principles which describe the degree to which a person is able to tolerate ambiguity, delay gratification, exhibit adaptive flexibility, demonstrate goal directedness, relate to self and others, and have a clear sense of personal identity. It views the individual in terms of the personal dynamics that are basic to his behavior and life-style. According to Brawer, "It provides both a conceptual foundation upon which the observer may build descriptions of an individual's behavior and a set of dimensions by which the individual may understand himself" (1973, p.34).

The subjects of the study were 1,876 community college freshmen, tested during their first week in school. The colleges they attended were selected because of their geographic proximity as well as their diversity and were named Urban, Suburban and Rural--names roughly indicative of the type of institution and locale they represented. A follow-up testing session occurred

at the end of the second semester for students in the initial testing group who were still in school.

A wide variety of information about the students was gathered. First, the Omnious Personality Inventory (Heist and Yonge, 1962), a polyphasic technique designed especially to assess characteristics of normal college populations, was administered. The second instrument used, the Freshman Survey, is a paper and pencil inventory designed to obtain demographic information and data regarding attitudes, feelings, and values as well as goal directedness about students. The Survey includes items from which Functional Potential scores were derived and thus provides the primary source of data for the 3-D study. The Terminal Values and Instrumental Values Scales (Rokeach, 1968) were included in the Survey as was an abbreviated version of Pace's College and University Environment Scale (1969).

The findings of the 3-D study have been reported and discussed in a number of publications. For example, a report of the responses of the freshmen from the three colleges to the two values scales is available in Brawer (1971). Responses to these values scales by faculty members from the same three colleges are considered in Park (1971). A more complete description of the study, the theoretical basis of the instruments used as well as analysis of the concept of Functional Potential, is available in Brawer's New Perspectives on Personality Development in College Students (1973).

PERSONALITY ORIENTATIONS AND VOCATIONAL CHOICE
IN COMMUNITY COLLEGE STUDENTS

Florence B. Brawer

In most attempts to understand human behavior, vocational interests and attitudes are seen as dimensions operating independently of others. Even the studies that include such techniques as the Kuder Vocational Preference Record (1960) and the Strong Vocational Interest Blank (1943) usually look at interests as unrelated to, if not isolated from, other indicators of personal functioning. Vocational and academic guidance counselors may select a battery of several tests--ability, aptitude, personality, and interests--but most perceive each instrument as measuring separate facets of the individual rather than as parts of his total personality structure.

A few exceptions to this type of segregation occur, happily--a case in point being the early work of Allport and Vernon (1931) and the subsequent inventory developed with Lindzey according to the six fundamental types of evaluation or Lebensformen postulated by Spranger (1928). Translating Spranger's "ideal types" into measurable dimensions--the Allport-Vernon-Lindzey Study of Values (1960) holds that while no person is, for instance, purely theoretical or religious, he may demonstrate a preponderance of choices for a particular value direction. Thus, interests are seen as manifestations of basic value constellations.

Also defending a more holistic thesis, Holland regards an individual's interests and vocational preferences as direct expressions of his personality

and personal development. "For many years," he writes "it was popular to interpret a person's scores on vocational interest inventories and his choice of vocation as a function of his 'vocational interests': as if these interests were different from or independent of personality. A long history of adherence to this concept produced independent literature known as interest measurement." The work of Berdie (1960, Strong (1943), Darley and Hagenah (1955), and Super and Crites (1962) epitomizes the view that interest inventories measure interests, vocational choices, and vocational preferences" (Holland, 1966, p. 2). By conceiving of vocational preferences and interests as expressions of personality, Holland classifies people into six types, each of which parallels six similar kinds of environments: Realistic, Intellectual, Social, Conventional, Enterprising, and Artistic.

Partly to get away from the knotty problems that previously separated interests and personality, and partly to develop a concept that includes not only interests and interest-types of people, but also, the degree of involvement in a particular direction, I have designated a category of variables defined as Orientations. Three independent but related-dimensions are measured in this scheme: the direction of libidinal flow that the individual indicates, the sense of involvement that he exhibits, and the energy that he focuses on particular areas of functioning. Five separate areas are specified: Ideas, Esthetics, Others, Practical, and Motor. As in Werner's (1948) outline of cognitive structure, each Orientation seems to originate as a rather undifferentiated core of attention which develops, intensifies, and expands to include other specialized features within narrower and more concentrated fields of emphasis.

Synthesizing several dimensions that are potentially valuable in assisting both the individual and the outside observer to describe what the person is about, the orientations all hinge on concepts that have a fairly long history--attitudes, values, needs, and, primarily, interests. Yet, while they are related to these other dimensions, the Orientations are not substitutes for any one of them. Rather, they act as a focus of several characteristics into a more central construct, a concentration in which the whole represents more than the sum of its parts.

The Orientations are related to particular constructs defined in other theories of human functioning. They closely approximate Adler's (1930) "style of life" concept in which he maintains that while every person holds the same goal of superiority or upward striving, various forms or ways of working toward that goal may be manifested. The particular life-style exhibited by any individual is the principle by which he functions; indeed, as the major force within his life, it commands all the diverse parts of his being. One person, for example, may strive for superiority through muscular development; another, through intellectual expertise. In every case, a person's behavior springs from the essential style that he has developed throughout his life. He learns, perceives, and retains that which best fits his particular style and all his subsequent experiences are assimilated according to that basic stance. Since feelings, attitudes, and apperceptions become fixed in the first years of life, Adler maintains it is practically impossible to change one's essential style after the formative period. New ways of expressing a unique life-style may be acquired but these are actually particular instances of the same basic style that had been formulated earlier. Thus, interests and other

behavioral manifestations act merely as reflections of the person's unique life-style.

The Orientations also relate to some ideas postulated by Jung (1923) in his classification of psychological types. Here two attitudes--introversion and extraversion--and four psychological functions--thinking, feeling, sensing, intuiting--are described. Introversion and extraversion represent polar positions, the individual whose predominant attitude is extraverted, being oriented toward the external or objective world and the introverted attitude orienting a person toward the internal or subjective world. Both attitudes are present in every person but ordinarily, one is dominant and conscious while the other is subdominant and unconscious. If the individual is predominantly extraverted in his relations with the world, his unconscious portion will be introverted.

Similarly, the four fundamental psychological functions show varying degrees of intensity. These are further divided into the rational and the irrational. Thinking and feeling--considered to be rational because they employ reason, judgment, generalization, and abstraction enable man to look for a certain lawfulness in the universe. On the other hand, sensation and intuition are considered irrational functions because they are based upon perceptions of the concrete, the particular or the accidental. Although every individual possesses all four functions, they are not necessarily equally developed. In fact, unless the person is extremely well integrated and motivated, they are seldom developed to the same extent. Usually the superior function is more differentiated than the others and plays a prominent role in consciousness. The least differentiated of the four is called the inferior

function; repressed and unconscious, it often expresses itself only in dreams and fantasies.

The four functions may be further described in the following way:

Thinking is ideational and intellectual in nature, the way in which man tries to comprehend the nature of the world and himself; Feeling is a value function, giving man his subjective experiences of pleasure and pain, of anger, fear, sorrow, joy, and love; Sensing is a perceptual or reality function in which the senses act as the guides; Intuition is perception by way of unconscious processes and subliminal contents. The intuitive man, for example, goes beyond facts, feelings, and ideas and constructs his own often elaborate way of getting at the essence of reality. Hall and Lindzey provide an example that succinctly and simply clarifies the nature of these four functions. "Suppose that a person is standing on the rim of the Grand Canyon of the Colorado river. If the feeling function predominates he will experience a sense of awe, grandeur, and breath-taking beauty. If he is controlled by the sensation function he will see the Canyon merely as it is or as a photograph might represent it. If the thinking function controls his ego he will try to understand the Canyon in terms of geological principles and theory. Finally, if the intuitive function prevails the spectator will tend to see the Grand Canyon as a mystery of nature possessing deep significance whose meaning is partially revealed or felt as a mystical experience" (Hall and Lindzey, 1957, p. 87).

The activities and functions interact in various ways: one system may compensate for the weakness of another; a system may oppose another system; or two or more systems may unite to form a synthetic whole. Compensation, for example, may be seen in the interaction of extraverted behavior that is then followed by a period of introversion. However, compensation also occurs

between functions: a person who stresses thinking and feeling in his conscious life, unconsciously will be an intuitive-sensation type. All contents of the conscious mind are compensated by contents of the unconscious mind, and although personality elements may operate as opposites, they do not always oppose one another but may also attract or seek another. Jung (1923) maintains that if all four functions are placed at equal distances from each other on the circumference of a circle, the center of the circle will represent a synthesis of the four. In such cases, none is superior or inferior and there are no auxiliaries. Such a synthesis, with all functions fully differentiated, only occurs when the Self (Jung's central core) has become fully actualized, representing a goal toward which the person strives in his development.

Looking at the Orientations in terms of these theoretical postures, I believe that each is present in every individual but to vastly differing degrees and that each is applicable to college population. Most people emphasize one of the five Orientations and this subsequently appears differentiated from the others, playing a prominent role in his consciousness. Again similar to the Jungian system, it is conceivable that there is a superior Orientation, as well as an inferior or less differentiated Orientation that expresses itself in dreams, fantasies, and aspirations. It is also conceivable that in the well-developed, mature individual, the Orientations will each be fairly differentiated and overtly expressed in some ways and to some extent.

Now that the theoretical basis for Orientations have been sketched, each of them can be described in more detail:

Involvement with Ideas. People who are oriented toward ideas are involved with a thinking and intellectual approach to life. Usually (not

always) they are academically bent, typically preferring a "well-rounded" or general education curriculum. They choose academic courses and cite vocational goals that require theoretical, often scientific approaches. Whether in or out of school, "idea" people are concerned with the pursuit of knowledge through books and verbal media. Although they often follow their thinking by further action, they prefer to think through rather than to act out problems. Complex, ambiguous situations may be sources of worry but they prefer such concerns to less challenging non-ideational experiences.

The person involved with ideas is also related to the "academic" person in the typology posited by Clark and Trow (1966), holding a value orientation similar to that of most college sociocultural systems, interested in learning about life but learning in the way he chooses. He may or may not focus on vocational proficiency and social adaptness (as does the academic man), but is motivated by intellectual curiosity and rejects those organizations that are basically social in nature for those of a political or intellectual bent. Accordingly, he is likely to respond affirmatively to such items as "Most courses are a real intellectual challenge" and "I would like to be a college instructor, lawyer, scientific researcher."

Involvement with Esthetics. Esthetically-oriented individuals appreciate beauty for beauty's sake. They are generally individualistic, take unique approaches to even mundane situations and frequently get emotionally involved with their school work. Although many of these people tend to be creative in either a product sense or in the way they proceed through life, they do not hold a monopoly on creativity. As a rule, however, they do closely approximate June's (1923) sensation types, depending on and working through their senses. For those Orientations, resulting in creative outputs

a considerable degree of intuition is usually involved. Chickering offers some insight into this type of person: "Encounters with wood, stone, clay, or paint, and the development of skills necessary for their management, offer potentials similar to those of athletics. Like the unequivocal achievements on the field, tangible and visible creations offer clear evidence of achievement and progress. And the creative process requires similar confrontations of emotions, enables similar legitimate expressions of feelings.... Experiences to develop skills in arts and crafts also interact with intellectual competence and the development of identity" (1971, p. 30).

In response to selected questions, the esthetically oriented person is inclined to state that he would like to be above average on such traits as artistic ability and creativity and if his house were burning, the first things that he would take after people and pets would be art objects.

Involvement with Others. Since the quest for self-knowledge is fundamental and the information gained about other people and other sources tends to be sifted through the person's own perceptions of self, the others-oriented person may appear egocentric, overly involved with his own being. Such concern with one's own experiences often becomes an initiating factor that eventually, however, extends well beyond self to a sincere interest in others. Thus, the person involved with self appears directly related to the person involved with others--in either a social or political sense, or both.

This type of individual may fit into either of the Jungian attitudes of introversion or extraversion. In Holland's words, he is "responsible, humanistic, frequently religious, has both verbal and interpersonal skills. . . and prefers to solve problems through feelings and intra-personal manipulations of others" (1966, p. 17). He may score high on items reflecting this awareness

of others. However, since the expression of behavior does not always truly reflect the person and since sometimes the person involved with others may actually be covering a basic absorption with self, behavior here may mask conscious intent or basic attitudes. In such cases, there may be a relationship to the tendency to "fake good"--to assume the stance one considers most socially desirable. On the other hand, this emphasis toward others may accurately represent the person's true orientation.

It would seem that the person who indicates awareness of others must also always show an interest in self. One can only love if he also loves himself. It is therefore hypothesized that the others-oriented person would think friendliness is a desirable attribute of the social environment, and would indicate a desire to be a leader and socially popular.

Involvement with the Practical. As in all five parts of this category, the close relationships between Orientations, occupational choice and personality is apparent. The tendencies toward certain fields or areas of interest are probably planted early in life. When it comes to choosing a specific occupation, the person is not always able to heed these basic tendencies--or possibly, he may be temporarily swayed from them. In such cases, the occupation may well become "a major influence in the sort of adult he becomes. If he has been able to select his vocation, he has tended to choose a social environment in which he feels comfortable, composed of persons with whom he likes to associate and whose regard he seeks. It will act to preserve personality traits he has developed or it creates strains that provoke change, or it may warp his personality if he cannot change" (Lidz, 1968, p. 379).

People who tend toward a practical orientation often prefer occupations that require numerical abilities, are often concerned with power, leadership,

and status, and are usually enterprising and expedient in their approach. Their orientation may be expressed in such vocations as salesman, business executive, or buyer--(all suggesting extratensive attitudes) or in such stereotypic introverted activities as accountant, budget reviewer, or cost estimator. People fitting into this area are like Clark and Trow's "vocational" man; they are generally job oriented. They are going to college in order to make a career choice and would like to be holding down a good paying job in five years hence.

Involvement with Motor Activities. This orientation subsumes a variety of interests--from athletics to minute motor tasks. A motor-oriented individual may operate at a wide range of levels and fields of interest (Roe, 1956) but in all cases, he utilizes the kinesthetic sense. In many respects, he also reflects Holland's holistic individual, the person who "copes with his physical and social environment by selecting goals, values, and tasks that entail the objective, concrete evaluation and manipulation of things, tools, animals and machines; and by avoiding goals, values, and tasks that require subjectivity, intellectualism, artistic expression and social sensitivity and skill" (1966, p. 19). It would appear, in Chickering's words, that "experiences encountered in athletics provoke reactions sharply relevant to the development of competence and sense of competence, and to the development of increased awareness of emotions and increased ability to manage them productively" (1971, p. 29).

Each of the five Orientations has been described in terms of theoretical formulations made on the bases of subjective processes. They are seen as close to--but never quite the same as--interests, values, and attitudes toward specific situations or objects. Thus, they must be perceived as speculations that are potentially useful in the person's attempts to understand himself and

his fellow man. At the same time, these brief sketches should suggest that it is a rare person who is entirely "pure" in his orientation. Indeed, it would be a narrow individual who was interested in only one sphere of activity or in one singular approach to life. Each person, however, does show particular interests and special attitudes toward certain dimensions. The degree to which he is involved in any one of these five categories may be the clue to his own particular orientation or his constellation of orientations.

Several questions follow: Do different types of people manifest different degrees of involvement in any or all five of the Orientations? How do the Orientations relate to designated academic majors for our junior college freshmen? Do they correlate with other personality or demographic characteristics or with the actual school attended by the respondents? The following presentation of data attempts to answer these questions.

RESULTS: ORIENTATIONS

The Orientation scores were obtained by taking linear combinations of variables, composed of items from the Freshman Survey, which were independent of those used in computing the Functional Potential scores. The Orientation Scores--Ideas, Esthetics, Others, Practical, and Motor--were then plotted for the students sampled. It was observed that the distribution of the Motor Orientation scores was not normal and that, except for the Practical Orientation scores, which approximated the normal distribution, the remaining Orientation scores were highly skewed toward the lower possible scores. The Orientation scores were divided into three equal intervals based on the range of scores possible. The χ^2 test for k independent samples was then used to test whether the frequencies of students in the three Functional Potential groups was the same for the three Orientation levels, with the results reported in Tables I - V.

TABLE I
IDEAS ORIENTATION AND FUNCTIONAL POTENTIAL

F.P. Groups	Ideas Orientation Level			
	N	Low	Middle	High
Low	170	88.6%	11.2%	0.0%
Medium	1271	64.8%	34.5%	0.7%
High	435	36.1%	59.8%	4.1%

N =

1876

$$\chi^2 (4) = 188.35, p < .001$$

The number of students in the three Functional Potential groups is not the same for the three levels of the Ideas Orientation. Proceeding from the Low to High Functional Potential groups, a higher proportion of students with Ideas Orientation is noted in the Medium and High categories.

TABLE II
ESTHETICS ORIENTATION AND FUNCTIONAL POTENTIAL

F.P. Groups	Esthetics Orientation Level			
	N	Low	Middle	High
Low	170	96.5%	3.5%	0.0%
Medium	1271	86.0%	13.5%	0.5%
High	435	77.9%	20.5%	1.6%

N = 1876

$$\chi^2 (4) = 37.6, p < .001$$

The higher Functional Potential groups had a larger proportion of students in the higher Esthetics Orientation categories. However, a high proportion of students in all Functional Potential groups belong to the low Esthetics category.

TABLE III
OTHERS ORIENTATION AND FUNCTIONAL POTENTIAL

F.P. Groups	Others Orientation Level			
	N	Low	Middle	High
Low	169	81.8%	17.6%	0.6%
Medium	1268	49.8%	45.0%	5.2%
High	435	23.2%	61.4%	15.4%
N =	1876			

$$\chi^2 (4) = 209.56, p < .001$$

The number of students in the three Functional Potential groups is not the same for the three levels of the Others Orientation.

TABLE IV
PRACTICAL ORIENTATION AND FUNCTIONAL POTENTIAL

F.P. Groups	Practical Orientation Level			
	N	Low	Middle	High
Low	169	41.4%	55.0%	3.6%
Medium	1268	17.1%	72.4%	10.5%
High	435	9.7%	70.1%	20.2%
N =	1872			

$$\chi^2 (4) = 113.37, p < .001$$

A high proportion (96.4%) of students from the Low Functional Potential

group belong to the Low and Middle Practical Orientation categories. Ninety point three percent of the students from the High Functional Potential group belong to the middle or high Practical Orientation categories, while most of the students from the Medium F.P. group were centered around the middle Orientation category.

TABLE V
MOTOR ORIENTATION AND FUNCTIONAL POTENTIAL

F.P. Groups	Motor Orientation Level			
	N	Low	Middle	High
Low	170	90.0%	10.0%	0.0%
Medium	1271	88.7%	10.1%	1.3%
High	435	84.4%	12.2%	3.4%
N =	1876			

$$\chi^2 (4) = 14.70, p < .01$$

Here again, a high percentage of students in all Functional Potential groups tend toward a low Motor Orientation score. The trend here is consistent with that noted for the previous four Orientations: the low F.P. group had the highest proportion of students with a low Motor Orientation score, while the high F.P. group had the largest proportion of students with middle or high Motor Orientation scores.

ORIENTATIONS AND THREE COLLEGES

The Orientations were also examined in terms of the three schools involved in the 3-D Project. The results of these analyses were presented in Tables VI - X.

TABLE VI
IDEAS ORIENTATION AND THREE COLLEGES

	N	4.00 points or less	4.01-8.00 points	8.01 points or more	Mean	S.D.
Urban	701	63.1%	35.4%	1.6%	3.87	2.00
Suburban	960	57.8%	40.0%	1.4%	4.13	1.91
Rural	215	62.3%	36.3%	1.4%	3.87	1.95
N =	1876	$\chi^2 (4) = 5.55$, not significant			F(2,1873)=3.95, p < .025 from One way ANOVA	

By examining the means, it seems clear that the Suburban students score higher in the Ideas Orientation than students at the other two schools. While this is statistically significant, however, practically there is no difference.

TABLE VII
ESTHETICS ORIENTATION AND THREE COLLEGES

	N	2.00 points or less	2.01-4.00 points	4.01 points or more	Mean	S.D.
Urban	701	89.9%	10.0%	0.1%	1.14	0.94
Suburban	960	80.8%	17.9%	1.3%	1.50	1.11
Rural	215	88.4%	11.2%	0.5%	1.26	0.99
N = 1876 $\chi^2 (4) = 30.65, p < .001$					F(2,1873)=2464, p<.0005 from One Way ANOVA	

As with the Ideas Orientation, the distributional characteristics of this Orientation are a fair approximation to the normal curve. A higher percentage of Suburban students scored three or more points on the Esthetics Orientation when compared with the other schools in our sample population.

TABLE VIII
OTHERS ORIENTATION AND THREE COLLEGES

	N	3.00 points or less	3.01-6.00 points	6.01 points or more	Mean	S.D.
Urban	701	49.4%	43.7%	7.0%	3.45	1.82
Suburban	960	45.2%	47.6%	7.2%	3.66	1.79
Rural	215	43.3%	49.3%	7.4%	3.57	1.91
N = 1876 $\chi^2 (4) = 3.94, \text{ not significant}$					F(2,1873)=2.48, not significant from One Way ANOVA	

There was no difference shown among the schools in the Others Orientation variable.

TABLE IX
PRACTICAL ORIENTATION AND THREE COLLEGES

	N	2.5 points or less	2.51-5.00 points	5.01 points or more	Mean	S.D.
Urban	701	18.8%	69.8%	11.4%	3.86	1.40
Suburban	960	15.7%	71.1%	13.1%	4.01	1.34
Rural	215	23.3%	67.0%	9.8%	3.67	1.52
N = 1876 $\chi^2 (4) = 8.88$, not significant					F(2,1873)=6.07, P < .005 from One way ANOVA	

This variable was the most normal of all the five Orientations. Although further contrasts would need to be run to statistically evaluate where the differences are, one could assume that the chief contributor is the lower practical Orientation of Rural College students and the tendency of students from the Suburban school toward a higher Practical Orientation.

TABLE X
MOTOR ORIENTATION AND THREE COLLEGES

	N	2.00 points or less	2.01-4.00 points	4.01 points or more
Urban	701	88.7%	9.7%	1.6%
Suburban	920	88.0%	10.3%	1.7%
Rural	215	83.7%	14.4%	1.9%
N = 1876 $\chi^2 (4) = 4.15$, not significant				

There is no difference among students from the three colleges in regard to their Motor Orientation.

In reviewing these data, it appears that the Orientations are not good variables to discriminate among the three schools. Only Esthetics and Practical are of any importance and in a practical sense, the demonstrated differences are small. However, to prove that these are not good discriminating variables, a stepwise discrimination was performed with the order of entry of these variables as Esthetics, Practical, Motor, Others and lastly, Ideas. The classification matrix was as follows:

TABLE XI

	N	Urban	Suburban	Rural	% Correctly Classified
Urban	701	<u>331</u>	<u>214</u>	156	17.22%
Suburban	960	326	<u>438</u>	196	45.62%
Rural	215	81	72	<u>62</u>	28.84%
N =	<u>1876</u>				

The underlined numbers in Table XI are the total number of correct classifications, while the percentage of N appear in the last column. As can be seen, these variables do not seem to classify with any accuracy.

It is useful here to list the characteristics of students whose responses on the Freshman Survey placed them in one of the five Orientations.

Ideas. Students scoring high on the Ideas Orientation tend to be those who:

1. Designate natural science, social science or humanities. Natural science students score the highest and engineering and technology students, the lowest.

2. like to plan their own work
3. like to make policy decisions
4. like to write reports
5. like to do original research or writing
6. like to keep records
7. indicate a desire to instruct, counsel, or advise others
8. like to make speeches or present reports
9. like to organize operations
10. like to attend meetings
11. like to analyze data
12. have fathers who are professionals (typically holding a doctorate or advanced professional degree--such as architect or attorney). Those who score the lowest on the Ideas Orientation had fathers who were public officials, supervisors, small business proprietors, or farm owners.
13. expect to be professionals. Those who scored the lowest on the Ideas Orientation indicate a desire to become a public official, supervisor, small business proprietor, or a farm owner.

Esthetics

Students scoring high on Esthetic Orientation tend to be those who

1. are enrolled in the Suburban college
2. indicate humanities and art majors
3. express a desire to plan own work
4. indicate a desire to make policy decisions
5. show a desire to do original research or writing

6. indicate a desire to instruct, counsel, or advise others
7. express a desire to take things easy
8. be classified as White. (No significant differences among other ethnic designations)
9. have fathers who do not fall into the semi-skilled or general laborer group and have fathers who are teachers, accountants, salesmen, or skilled clerical workers

Others

Students high in the Others Orientation tend to be those who

1. express desire to supervise others
2. indicate a desire to make policy decisions
3. show a desire to follow the directions of a boss they like
4. express an interest in writing reports
5. desire to do original research and writing
6. show a desire to keep records
7. desire to counsel, instruct, and advise others
8. show a desire to make speeches and present reports
9. indicate a desire to organize operations
10. indicate a desire to attend meetings
11. indicate a desire to analyze data
12. not indicate a desire to "take it easy"
13. have fathers who are professionals. Those students whose fathers are small business proprietors or farmers, salesmen or skilled clerical, semi-skilled or general laborers, score the lowest on the Others Orientation.

14. expect to become public officials or supervisors. Students who expect to run small businesses, own farms, or become general laborers score lowest on the Others Orientation
15. positively relate with most students at their schools
16. indicate a desire to relate with student organizations

Practical

Students scoring high on Practical Orientation tend to be those who

1. indicate a desire to supervise others
 2. indicate a desire to follow directions of one's boss
 3. indicate a desire to do original research or writing
 4. show an interest in keeping records
 5. indicate a desire to instruct, counsel, and advise others
 6. desire to attend meetings
 7. indicate a desire to analyze data
 8. do not indicate a desire to "take it easy"
 9. have mothers who are managers or executives. Students whose mothers are public officials or supervisors score the lowest in Practical Orientation
 10. expect to be public officials, supervisors, or salesmen
 11. are White. Among the other races, Orientals have the lowest Practical Orientation scores.
 12. indicate positive relationships with other people where they work.
- The big difference is among those who score in the upper 1/3 of the Practical Orientations interval--i.e., a much higher percentage of

students who scored 5 or more points on the Practical Orientation relate (positively) to people where they work than (negatively) those who indicate no sense of relatedness.

Motor

Students who score high on Motor Orientation tend to be those who

1. do not indicate the Humanities and Business Administration and those who do indicate Engineering and Technology as majors
2. indicate a desire to supervise others
3. indicate no interest in doing original research and writing
4. indicate a desire to "take it easy"

These data suggest that, aside from their rather consistent and expected relationships to certain occupational expectations as well as to other selected variables, the Orientations also seem to represent a degree of intensity or commitment. In general, High Functional Potential students appear more definite in their Orientations. At the same time, the Orientations are not good indicators of inter-school differences. Of the five groups in this category, Esthetics and Practical appear to best discriminate between schools but it seems that a school cannot be identified by the Orientations of its students. In fact, throughout the three schools, there was a diversified group of respondents for all five Orientations. The greatest practical significance of these findings is that they support the idea of a close linkage between various personality dimensions in students which can be identified and vocational interests and attitudes.

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